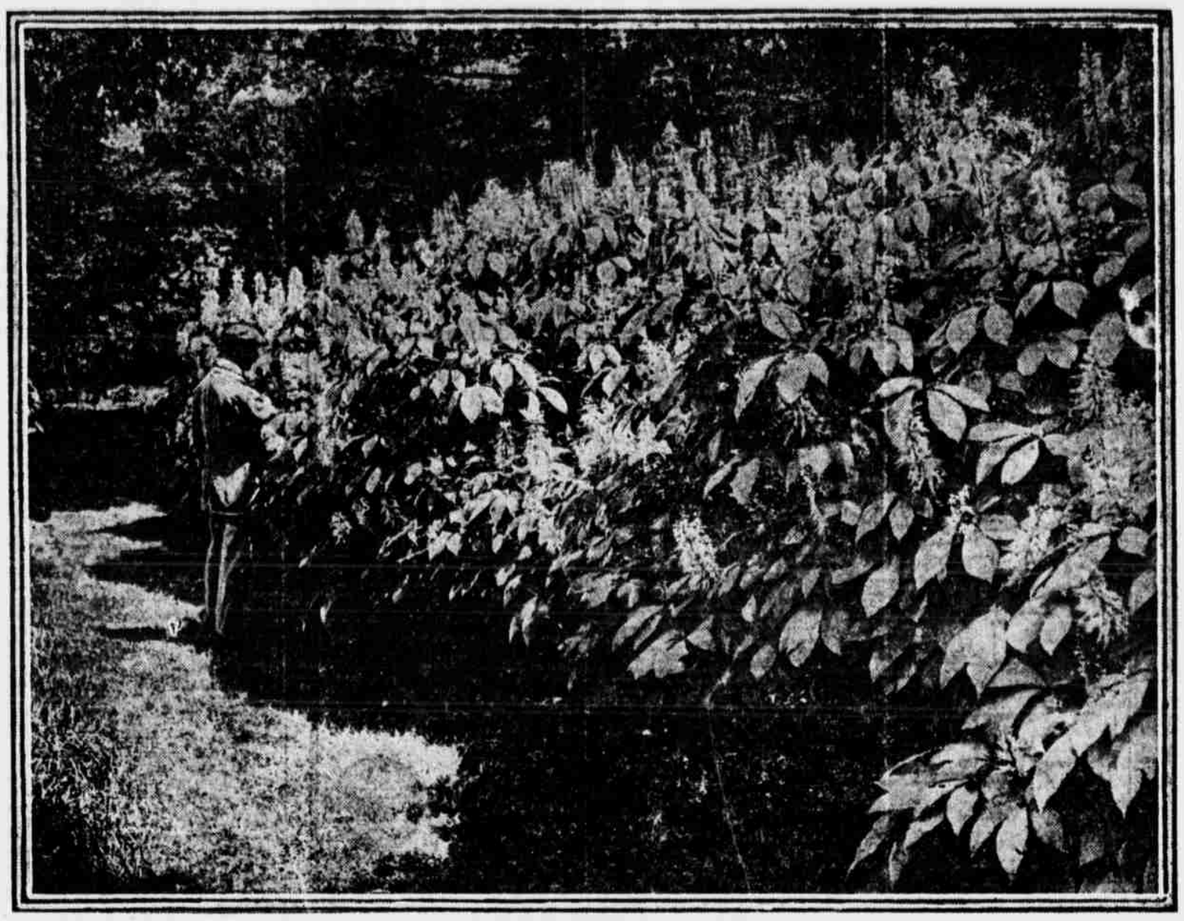
HORSE CHESTNUT TREE HAS GREAT ORNAMENTAL VALUE

Often Wonderfully Handsome and Are to Be Recommended for Planting on Large Estates or Small Gardens--Flowers Are Pretty, With Various Colors



Æsculus pariflora, Dwarf Buckey or Horse Chestnut.

Flowers of æsculus pariflora, almost natural size.

The ornamental value of the horse chestnuts or buckeyes is not appreciated as widely as it should be. The fact is that many of these trees are wonderfully handsome and are to be recommended for planting on large estates or in smaller gardens. Probably there is no better place in the world to get acquainted with the different species and varieties than in the Arnold Arboretum in Boston, where much attention has been given to these trees. Perhaps the most brilliant of all is the scarlet flowered Æsculus discolor mollis. The flowers have a red calyx and corolla. This makes it quite different from the typical Æsculus discolor, the flowers of which have yellow petals more or less flushed with rose.

Æsculus discolor and its varieties are to be distinguished from the other American species by the soft covering of pale down on the surface of the leaflets. They also have pale orange brown seeds, which differ from other kinds except Æsculus californica.

Another handsome buckeye is a native of central Georgia, but seems perfectly hardy in New England, as it blooms freely in the Arnold Arboretum each season. It is known as Æsculus georgiana and has compact clusters of yellow and rose colored flowers. If it fulfils the expectations of Prof. Sargent, director of the arboretum, it will prove one of the handsomest and most interesting Southern shrubs which the arboretum has made known and introduced into gardens.

In the collection there is an unusually brilliant French horse chestnut called Æsculus briotii. There are few trees hardy in the Northern States which bear such showy flowers. Moreover, it begins to bloom when it is not more than ten feet high, and as it thrives with only ordinary care it seems well worth wider planting in the gardens of America.

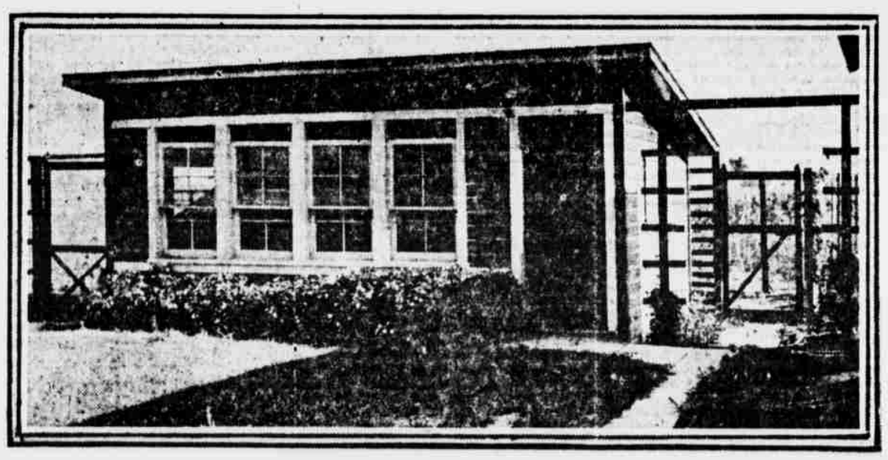
A late flowering buckeye is called Æsculus harbisonii. It is a dwarf kind and probably is a hybrid seedling of A. georgiana and a red flowered variety of A. discolor. It was first discovered in 1905 and grew from seeds gathered near Stone Mountain in central Georgia. The leaves of this hybrid are lighter green than those of its probable parents, while the flowers are borne on stout red stems in broad red panacles. They are about three-quarters of an inch in length, with a rose colored calyx and canary yellow petals.

The very last kind to blossom is Æsculus parviflora. It is a tall, round topped, shapely shrub, well suited for planting in large masses, although it looks well as a single specimen. In good soil and when uncrowded by other plants it soon spreads over a large area. There is a remarkably fine group in the buckeye collection at the Arnold Arboretum, which is viewed with surprise as well as delight by visitors. While the shrubs extend over a wide area, they are hardly more than ten feet tall and are covered with thousands of long, narrow, erect spikes carrying myriads of small white blossoms. These spikes stand well above the leaves and are exceedingly conspicuous during the latter part of July. This tree is also a native of the Southeastern States, being found all the way from South Carolina to Florida and Alabama. It is perfectly hardy, though, not being affected by the severest winters, and there is no reason why it shouldn't be planted much more extensively. It is an especially fine shrub for use on estates where it can be given an abundance of room. Most gardeners in the North know nothing about the dwarf form of the horse chestnut or buckeye, and Northern gardens suffer as a result.

The question is often asked, "What is the distinction between the horse chestnut and the buckeye?" Prof. Sargent explains the matter in a recent bulletin as follows:

Horsechestnut as generally applied is the name of the Old World species of Æsculus, and Buckeye is commonly used for the American species of this genus. The Old World species which are found in southeastern Europe, on the Himalyas, in central and northern China and in Japan have white flowers, often marked or tinged with yellow, but the flowers of the American species are yellow, red, scarlet, red and yellow, and white. The European species, however, are best distinguished from those of the New World by the resinous exudations which thickly cover their winter buds and are not found on those of the American species with the exception of the one which grows in California (*A. californica*). The original horsechestnut, *Æsculus Hippocastanum*, long cultivated in western Europe but only in recent years known to be a native of the mountains of Greece, is the handsomest of the whole genus and one of the most splendid trees in the world. It was brought to America at least 150 years ago, and there are noble specimens in many of the seaboard cities and towns of the Eastern States. The Himalayan horsechestnut and the species of central China are not hardy here; it has not yet been possible to establish the north China horsechestnut in the arboretum, but the Japanese species (*A. turbinata*) is hardy and grows fairly well here, although it is less satisfactory in cultivation and a less beautiful tree than the Grecian horsechestnut.

HOW TO BUILD A CHICKEN HOUSE TO LOOK ATTRACTIVE AS WELL AS USEFUL



The attractive and serviceable poultry house shown in the illustration cost less than $100 in 1914. It has a concrete floor, roosts, trap nests, a water system and other hen house accessories.

The building is 12 by 18 feet, and is divided into three pens with an aisle at one end. The house is 7½ feet high from the floor to the front eaves and 6 feet at the back. Yellow pine drop siding of medium quality was used for sheathing and roofing purposes, the latter being overlaid with prepared stone surface asphalt roofing. Adjoining the house, with direct access to it, are four pens, one of which is used for small chickens, being enclosed with one inch mesh chicken wire.

The windows are an attractive feature of this house. They cost complete $1.50 apiece, those at the side being bungalow windows of large and odd size which the dealer was glad to get rid of. The front windows can be opened both at the top and bottom for ventilation. The side windows, which help to provide free circulation of air, are practically weather proof, as they are hinged at the bottom and swing inward. The material for the floor of this house cost $12, the owner laying the concrete floor during the evenings by aid of an oil lantern.

To begin with, this poultryman had only 15 hens, while his capacity record has been 60 mature hens and pullets. A novel feature of his poultry operations was the maintenance of a number of Belgian hares which he raised for meat. One pen in the chicken house was equipped with four rabbit hutches. In the main he raised Belgian hares only during the fall, winter and early spring up to the time of the setting season, when the space occupied by the rabbits was needed by the hens. Then he would reduce his rabbitry to the minimum point. In this way the rabbit quarters provided plenty of space by the use of partitions for six or more setting hens at a time. After the hatching season the owner would place the broody hens in the same pen with several rabbits, as the presence and hopping about of the rabbits would ultimately break the hens of their broodiness.

The attractive thing about these rabbit raising operations was that valuable food was produced from weeds and waste, as practically the only feed for the rabbits was grass clippings, wild hay and weeds. During the young bearing season he would feed the does a little skim milk and a small amount of oats, but never more than one quart of oats a week. In the course of two years he raised and ate about seventy-five rabbits weighing an average of two pounds apiece. All this meat was produced as a by-product of his poultry operations with small expense or trouble.

Another desirable point about the rabbits was that they required little care as compared with poultry. The rabbits were fed at any time of the day or night with satisfactory results.

"It is a comparatively simple matter to kill and dress two rabbits in ten minutes," remarked the suburbanite, "but I never was able to pick and dress a single chicken in less than double that period. My family did not tire of the rabbits, because as a rule we alternated the rabbit flesh with chicken and other fresh meats. The profits which I realized from my poultry and rabbit operations came entirely from the Belgian hares, as my White Plymouth Rocks only about paid expenses, since I had to purchase practically all my feed for them. However, it is a great convenience for a suburbanite to have on hand two sources of fresh meat in addition to a plentiful supply of fresh eggs."

This poultry house is neat in design and does not offend the eye in looking over the yard in the rear of the house. Covered with climbing roses at the ends, training the vines over the ends and sides, the building will be quite hidden most of the season. Gardenia and evergreen gem are two excellent roses for this purposes, or any of the wichurianas. The front can be covered with clematis jackmani and in the summer would be a mass of purple flowers. In the autumn the clematis can be cut back almost to the ground, so the house will have the benefit of all the heat from the sun all winter. In the summer the vines will shade the house and keep it cool. Flowering or foliage plants can be planted in front of the clematis.

America leads the world in home canning. The French Ministry of Agriculture requested the loan of some American home demonstration workers to teach the French people how we do home canning and drying.

Four home demonstrators are now in France at the expense of the American Commission for Devastated France under the direction of the French Government. Material for a publication has been prepared by the United States Department of Agriculture and will be issued and distributed by the French Ministry of Agriculture.

Gypsophilas have long, somewhat tender roots, and it is exceedingly difficult to lift a clump of plants after they have become established without breaking them. When old plants are transplanted they never entirely recover and do as well as when allowed to remain where they were started. Plants from seeds attain good size by the third year.

An English horticultural journal gives the information that pea and bean weevils can be controlled by spraying with a mixture of two ounces of soda and one ounce of carbolic soap in a gallon of water. One thorough application to the ground about the peas or beans is said to be sufficient.

A liberal application of soot about the plants when they are young will also be found helpful.

Give clover fields plenty of lime and acid phosphate.

Hardy chrysanthemums should be lifted and divided every third year. The old clumps become thick and produce many small flowers. Dividing the plants will cause fewer but larger flowers. It is too late to divide now without loss of flowers. Divide the plants early next spring.

Throw away cineraria and primula plants that are through flowering. Start new plants from seeds for next winter and spring.

Old cinerarias planted out in a shady border of light rich soil will produce offshoots which will make good flowering plants if potted up.

ENDIVE.

Endive may be had over a long season by making successional sowings until the middle of August. It requires good soil, sowing thinly and covering lightly in drills about a foot apart, thinning out the plants to eight to ten inches apart in the rows. Blanching is accomplished by covering the plants with large pots or boxes.

There are two varieties of endive—the curled, which is used for garnishing, and the broad leaved, which is blanched by tying up like cos lettuce.

Honesty, wallflowers, Canterbury bells, delphiniums, foxgloves and other perennials should be sown now for flowering plants next year.

Make the soil very fine in the beds and keep the soil moist.

American onion smut has reached England and is causing very serious damage. American plant pathologists and entomologists should make an effort to keep our plant insects and diseases at home, now that we are barring foreign importations of plants, or all American seeds and plants will be prohibited abroad.

The soil around fruit trees set out this year should be kept well cultivated to conserve the moisture in the soil. Keep the top soil well stirred up by constant hoeing. A mulch of stable manure or lawn clippings should be placed around each tree, not letting the mulch touch the trunk of the tree. Supply water in very dry weather if the trees show indications of wilting.

Young trees that become stunted never give profitable results.

GOOSEBERRIES.

Gooseberries produce fruit both on the old and new wood. Pruning, which is best done in the spring, should be confined to thinning out the branches so as to secure well rounded bushes with open heads. Cut back to an upward pointing bud any branches that bend down to the ground.

Gooseberries like water. Not that they cannot have too much, but in well drained soil they enjoy a good sprinkling daily so the ground about them will not dry out.

A mulching of well rotted manure about the plants as soon as the fruit buds have set is beneficial, enabling the plants to perfect their fruit and form flowering buds for the following year. Keep the mulch damp.

To produce extra fine specimens of fruit for exhibition purposes, place a deep saucer of rain water on an upturned pot, so the tips of several berries will be immersed in the water. These berries will grow to a large size and it is the best way to produce extra large berries for exhibition purposes.

LIQUID MANURE.

Solid manure is a food, while liquid manure is a stimulant. All soils require solid manure, and this should be applied in the autumn, if possible; certainly in the early spring before planting or sowing.

The time to apply liquid manure is when the plants are making growth or just as the plants are about to fruit or flower, if they are grown for the flowers.

Fruit plants are best treated with liquid manure when the fruit is in a half developed condition; flowering plants just before the buds show color; vegetables when about half grown, and foliage plants that make new growth in the spring when the new growth is well started.

Never apply liquid manure when the soil is dry. Water dry soil lightly before applying liquid manure.

Liquid manure may be prepared from stable manure or from cows, sheep, fowls or pigeons.

A barrel containing thirty-six gallons of water in a secluded place in which a bag of half a bushel of horse or cow manure has been placed can conveniently be renewed. The bag should be moved about until the contents have pretty well dissolved. Draw off as wanted and dilute with water until the color of weak tea.

Fowl manure is strong and only a peck may be used to thirty-six gallons of water. Always apply liquid manure directly to the soil, not over the foliage or flowers. Pot plants should not be given more than one application a week.

Before the war the United States had approximately one-tenth of all the sheep in the world. Since then the total number of sheep has decreased from all causes about one-tenth, possibly more. That makes the world decline in excess of 50,000,000 sheep, or slightly greater than the number of sheep in the United States.

BUILDING NESTS FOR HENS.

Nests should be situated in a more or less dark place, for then the hens will be less apt to eat the eggs. A good place is directly beneath the roost platform, with the nests so arranged that the hen enters from the side toward the wall. Each nest should be from twelve to fourteen inches square, and high enough (about twelve to fourteen inches) to be convenient for the hen to enter. The partitions between the nests should be high enough to prevent the hens from rolling the eggs from one nest to another, and low enough to permit hens to go from one nest to another, otherwise they will fight and eggs will be broken. Fine hay or straw makes a good nesting material.

There is nothing that contains so much food value in so digestible a form as a fresh egg.